



RIDOT TMC Unplanned Incident Statistics and Performance Measures 4/1/2009 To 6/30/2009

The Rhode Island transportation system serves 39 cities and towns, encompassing rural, metropolitan, and tourist areas. The Rhode Island Department of Transportation's Transportation Management Center (RIDOT TMC) has been addressing the problem of increasing congestion in Rhode Island by informing the traveler of crashes and unusual delays. In doing so, the TMC has provided measurable benefits to the transportation system, and has developed the technology and institutional awareness necessary to expand the Intelligent Transportation Systems (ITS) Program (called RhodeWays) to the benefit of Rhode Island travelers.

The RIDOT TMC maintains detailed statistics on incidents that we manage from our center. Because the data are entered by our TMC Operators, the statistics are dependent on what we can observe on the roadways with our equipment. Review and compilation of these statistics is part of our ongoing Performance Measurement effort. Through this effort, we are quantifying the benefits of the ITS program in our state, and are also able to monitor improvements in the efficiency and effectiveness with which we manage roadway incidents. By making these statistics available to you on a monthly basis, we hope that you can learn more about the program and understand the benefit of the service we provide to the Rhode Island motoring public.

These monthly reports represent statistics for unplanned incidents on Rhode Island's roadways. The types of incidents included in the report include disabled vehicles, debris on the roadway, emergency roadwork, and vehicle accidents, including jack-knifed trucks and vehicle spinouts. Additionally, a category exists for congestion delays that are outside of typical recurring congestion. The TMC does assist in information dissemination for planned events (such as construction) as well, but those types of events are not included in the statistics. Also, abandoned vehicles are not included since they tend to skew the statistics.

We hope you find this report interesting and that it helps in understanding the significant benefit that the RhodeWays program provides to the people who travel Rhode Island's roadways every day. Also, please remember to check the TMC website frequently for updates (<http://www.tmc.state.ri.us>), including construction and incident information.

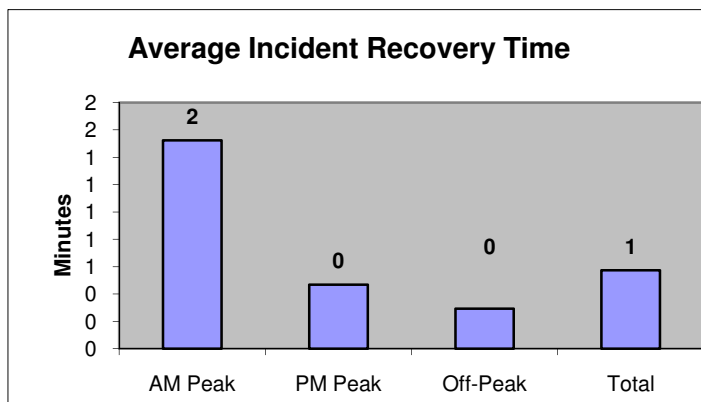
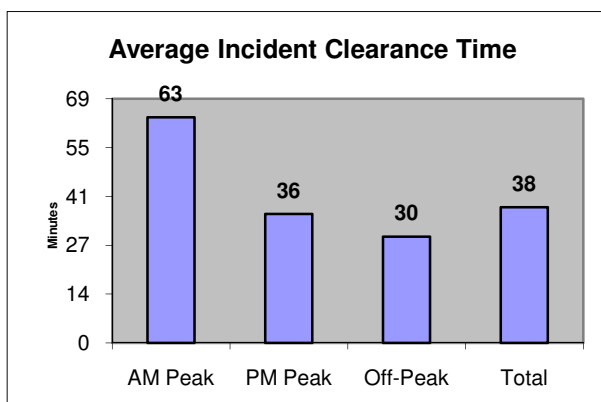
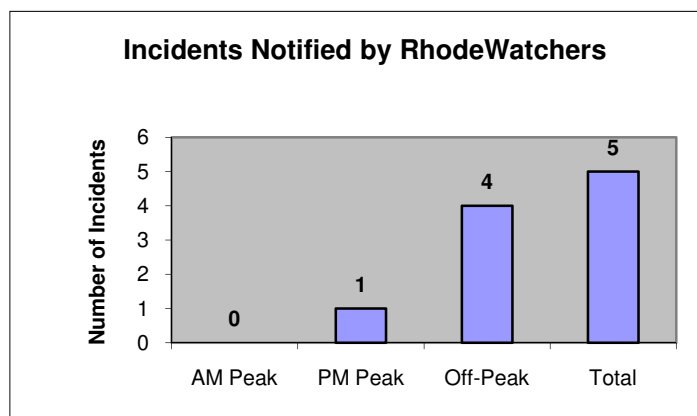
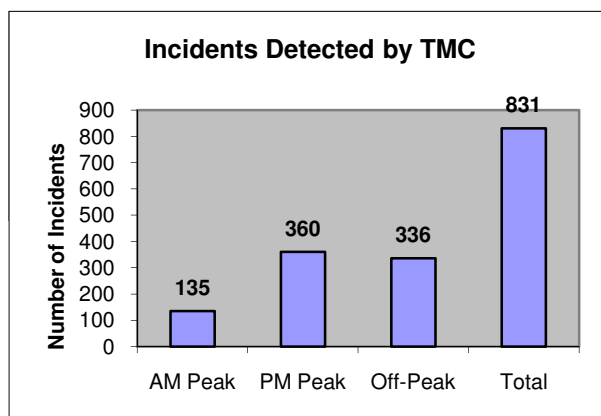
RIDOT TMC Unplanned Incident Statistics and Performance Measures Report

1. Peak Period Incident Statistics*

	AM Peak	PM Peak	Off-Peak	Total
Number of Incidents	143	367	348	858
Avg. Incident Duration (hr:min)	65	37	30	39
Avg. Incident Clearance Time (hr:min)	63	36	30	38
Avg. Incident Recovery Time (hr:min)	2	0	0	1
# Detected by TMC Operators (CCVE)	66	179	136	381
# Detected by TMC, State Police	69	181	200	450
# Notified by RhodeWatchers	0	1	4	5
# of Messages Posted VMS	20	25	50	95
# of Messages Posted DMS	75	126	180	381
# of Messages Posted HAR	67	99	106	272
# of Messages posted Web	124	357	308	789
Avg. Delay Cost**	\$274,595	\$155,207	\$127,483	\$163,861
Total Delay Cost	\$39,267,078	\$56,961,148	\$44,364,211	\$140,592,437

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday

** Delay Cost is a function of incident duration, volume on the roadway, delay per person, and cost per hour of delay for both commercial and personal vehicles. Average delay cost includes only incidents with a lane blockage and represents average cost per incident.



Note: Statistics in this report are only for incidents that the TMC reported or responded to. They do not include all incidents that occurred on Rhode Island roadways

Incident Clearance Time is the time from the start of an incident (or when it is detected) to the time it is cleared from the roadway.

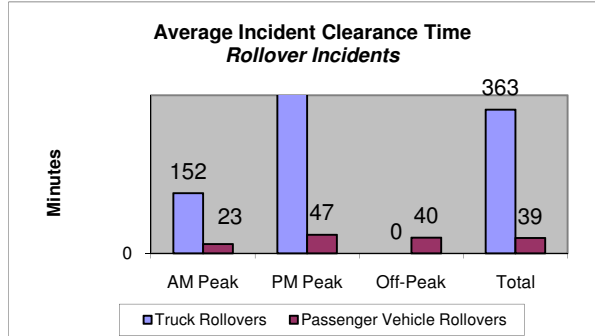
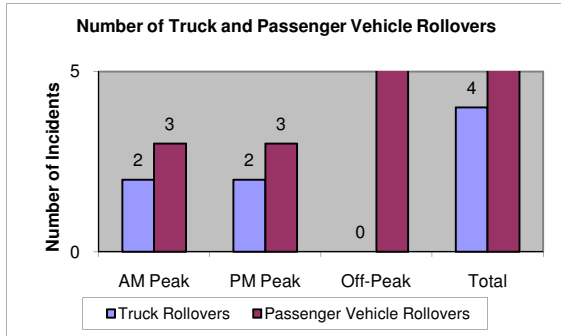
Incident Recovery Time is the time it takes for the roadway to be rid of residual delay following incident clearance. It is based on TMC Operator observation.



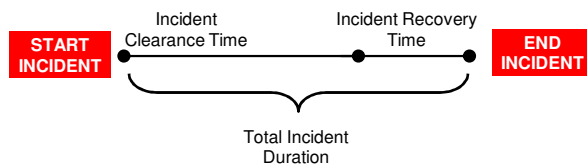
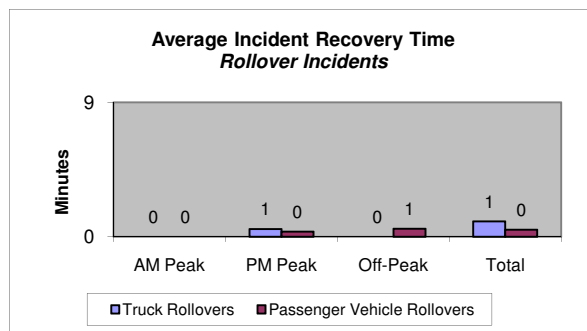
2. Rollover Incident Statistics*

VEHICLES	Trucks				Automobiles			
	AM Peak	PM Peak	Off-Peak	Total	AM Peak	PM Peak	Off-Peak	Total
No. of Rollovers	2	2	0	4	3	3	25	31
Avg. Incident Duration (min)	152	575	0	363	23	47	40	39
Avg. Incident Clearance Time (min)	152	574	0	363	23	47	40	39
Avg. Incident Recovery Time (min)	0	1	0	1	0	0	1	0

* AM Peak: 6:00AM to 10:00 AM, PM Peak: 3:00PM to 7:00PM, Monday - Friday



Roadway	Exit Number	Number Of Rollovers
Interstate 195 Eastbound	6	1
Interstate 195 Eastbound	3	1
Interstate 195 Eastbound	4	1
Interstate 195 Westbound	N/A	1
Interstate 295 Northbound	8A	1
Interstate 295 Southbound	9A	1
Interstate 395 Northbound	N/A	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	2	1
Interstate 95 Northbound	4	1
Interstate 95 Northbound	29	1
Interstate 95 Northbound	25	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	16	1
Interstate 95 Northbound	21	1
Interstate 95 Southbound	27	1
Interstate 95 Southbound	30	1
Interstate 95 Southbound	14	1
Interstate 95 Southbound	12A	1
Interstate 95 Southbound	7	1
Interstate 95 Southbound	20	1
Interstate 95 Southbound	25	1
Interstate 95 Southbound	24	1
Route 10 Northbound	N/A	1
Route 102 Eastbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Northbound	N/A	1
Route 146 Southbound	N/A	1
Route 146 Southbound	N/A	1
Route 37 Eastbound	N/A	1
Route 37 Westbound	N/A	1
Route 4 Northbound	5	1
Route 4 Southbound	8	1
Route 6 Eastbound	N/A	1
TOTAL		35



3. Incidents by Severity Level

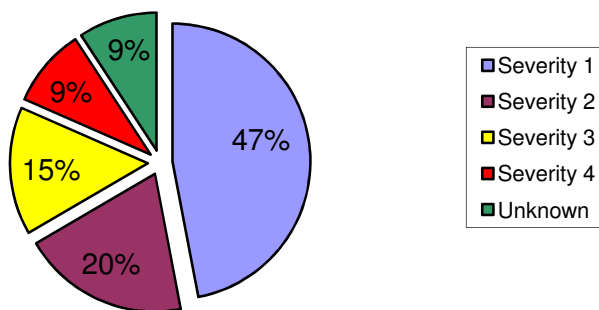
Severity Level*	No. of Incidents
Severity 0	424
Severity 1	204
Severity 2	85
Severity 3	65
Severity 4	40
Unknown	40
Total	858

Number of Incidents with a Secondary Incident:

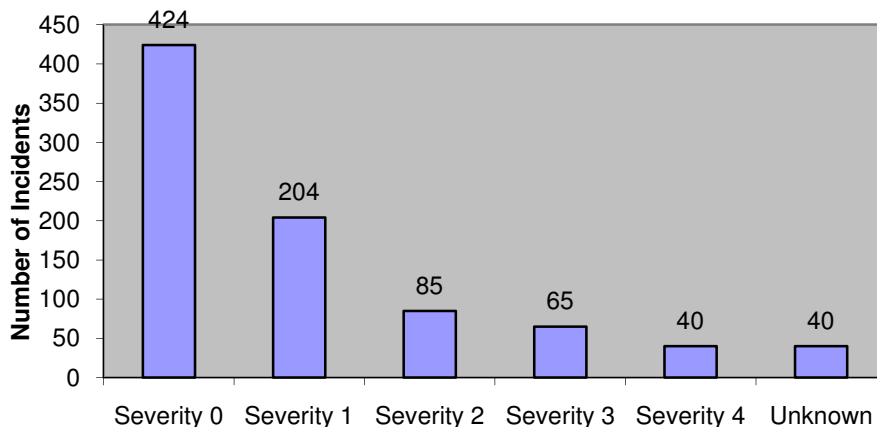
Percentage of Incidents with a Secondary Incident:

Note: A "secondary" incident is one that is the result of an earlier incident.

Percent of Incidents by Severity Level



Number of Incidents by Severity Level



*Definition of Incident Severity Levels:

Severity 0: No injuries and no travel lanes blocked

Severity 1: 1/4+ travel lanes blocked with no injuries OR median/shoulder closed with injuries

Severity 2: 1/3 or 2/4+ lanes blocked OR Fire w/ 0 lanes closed OR Hazmat w/ 0 lanes closed

Severity 3: 1/2 or 2/3 or 3/4+ lanes blocked OR Fire w/ 1/3 or 2/4 lanes closed OR

Hazmat w/ 2/4 lanes closed

Severity 4: All travel lanes blocked OR fatality OR Hazmat w/ clean-up OR Fire w/ 1/2, 2/3, 3/4 lanes closed

OR Structural damage w/ 1/3, 2/3+ lanes closed

Unknown: Incidents without a recorded severity level

Note: For travel lanes blocked terminology, "1/4" indicates 1 out of 4 lanes blocked

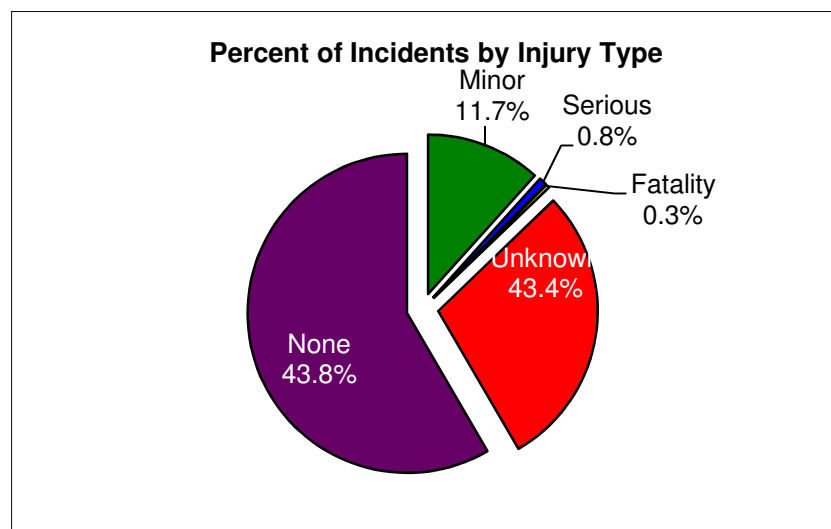
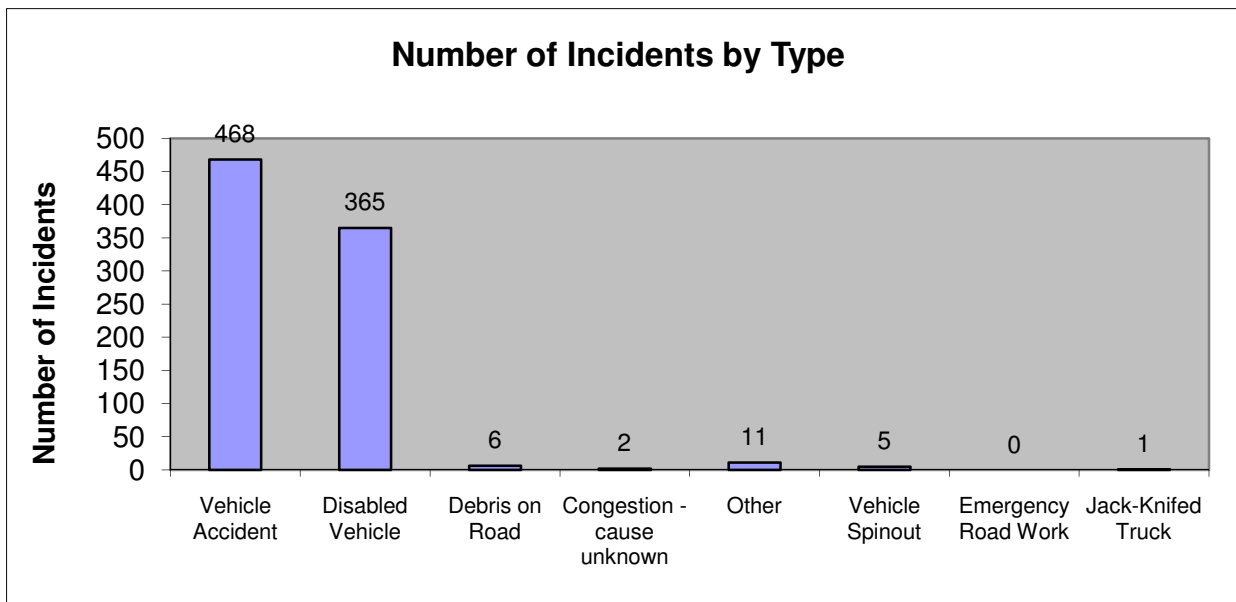


4. Incidents by Type

Incident Type	No. of Incidents
Vehicle Accident	468
Disabled Vehicle	365
Debris on Road	6
Congestion - cause unknown	2
Other	11
Vehicle Spinout	5
Emergency Road Work	0
Jack-Knifed Truck	1
<i>Total Number of Incidents</i>	<i>858</i>

5. Incidents by Injury Type

Injury Type	No. of Incidents
Minor	100
Serious	7
Fatality	3
Unknown	247
None	501
<i>Total</i>	<i>858</i>



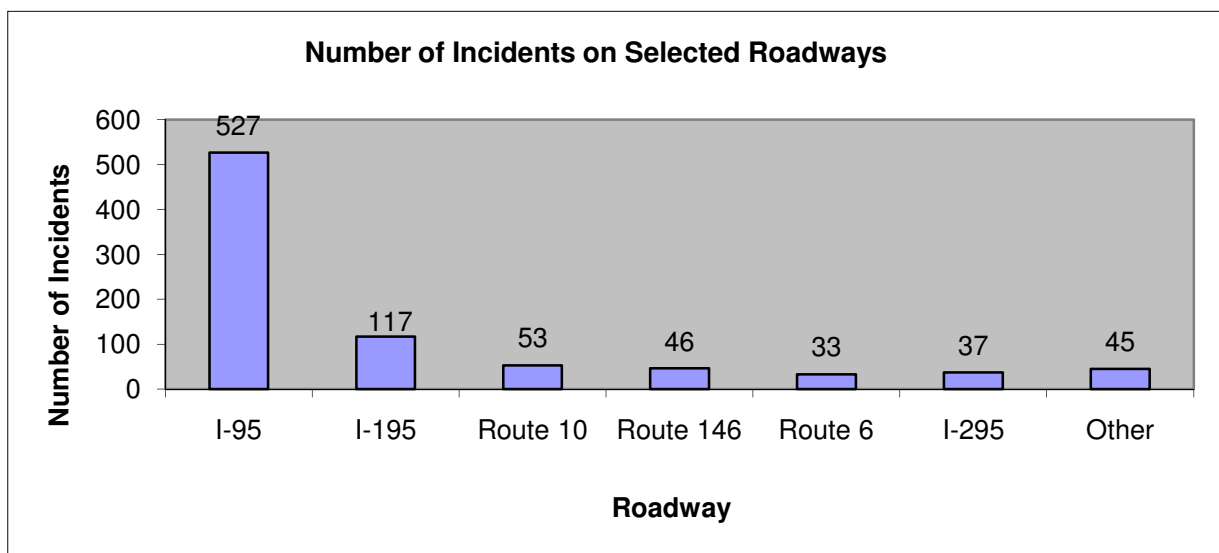
6. Incidents by Pavement and Weather Conditions

Pavement Condition	No. of Incidents
Dry	650
Wet	208
Icy	0
Snow-Covered	0
Flooded	0
Other	0
<i>Total</i>	<i>858</i>
Precipitation	
None	696
Light-moderate rain falling	149
Heavy rain falling	13
Light-moderate sleet falling	0
Heavy sleet falling	0
Light-moderate snow falling	0
Heavy snow falling	0
<i>Total</i>	<i>858</i>
Wind	
Calm to Moderate	844
Moderate to Strong	13
Gusts over 50 mph	0
Gusts over 75 mph	0
Hurricane	0
Other	0
N/A	1
<i>Total</i>	<i>858</i>
Visibility	
Clear	729
Light fog	9
Dense fog	5
Reduced- rain	110
Reduced-snow	0
Poor-heavy rain/sleet	3
Poor-heavy snow	0
Reduced-smoke	0
Other	0
N/A	2
<i>Total</i>	<i>858</i>

7. Incidents Detected by Primary Notifier on Selected Roadways

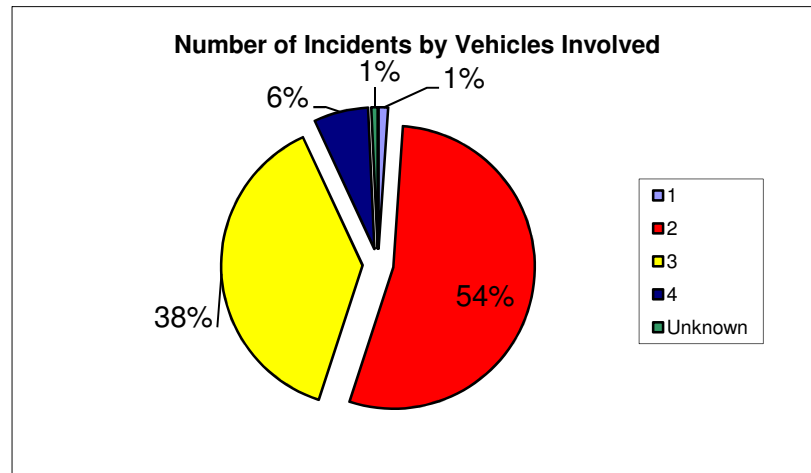
Roadway	Primary Notifier	No. of Incidents
I-195	TMC Operator	59
	State Police Scanner	30
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	28
	Total	117
I-95	TMC Operator	261
	State Police Scanner	144
	Local Fire Department	1
	Rhode Watcher	2
	Media/MetroNetworks	3
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	116
	Total	527
I-295	TMC Operator	8
	State Police Scanner	9
	Local Fire Department	2
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	18
	Total	37

Roadway	Primary Notifier	No. of Incidents
Route 10	TMC Operator	25
	State Police Scanner	11
	Local Fire Department	0
	Rhode Watcher	2
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	15
	Total	53
Route 146	TMC Operator	13
	State Police Scanner	16
	Local Fire Department	0
	Rhode Watcher	0
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	1
	Other	17
	Total	47
Route 6	TMC Operator	9
	State Police Scanner	13
	Local Fire Department	1
	Rhode Watcher	1
	Media/MetroNetworks	0
	Traffic.com	0
	TMC State Police	0
	Transcom	0
	Other	9
	Total	33



8. Incidents by Number of Vehicles Involved

No. of Vehicles Involved	No. of Incidents
1	9
2	451
3	318
4	52
5	17
6	3
7	2
8	0
9	0
10+	0
Unknown	6
Total Incidents	858

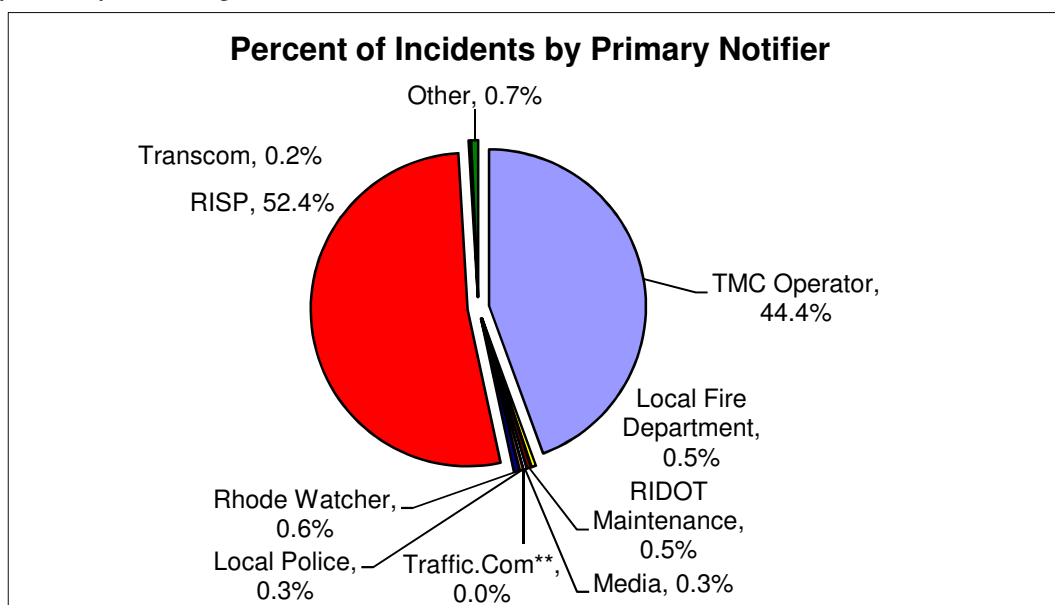


9. Incident Notification

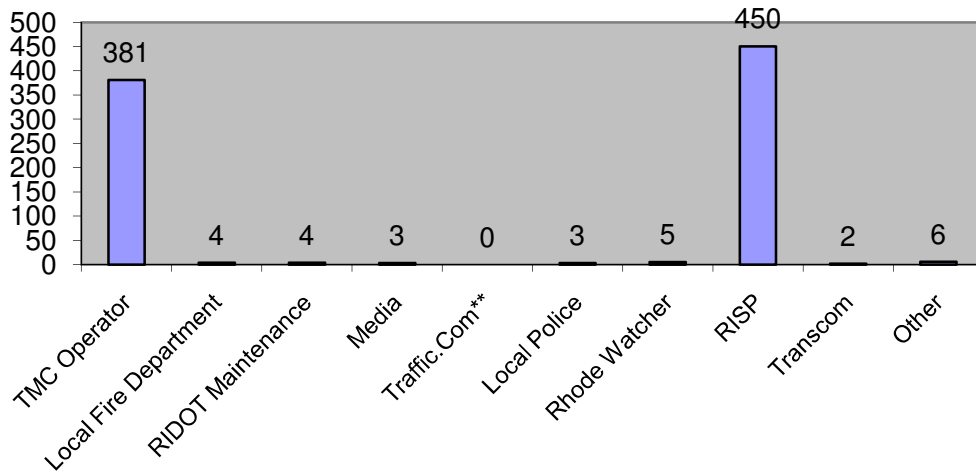
Primary Notifier*	No. of Incidents
TMC Operator	381
Local Fire Department	4
RIDOT Maintenance	4
Media	3
Traffic.Com**	0
Local Police	3
Rhode Watcher	5
RISP	450
Transcom	2
Other	6
Total	858

*First notifier of the incident to TMC

**Formerly Mobility Technologies



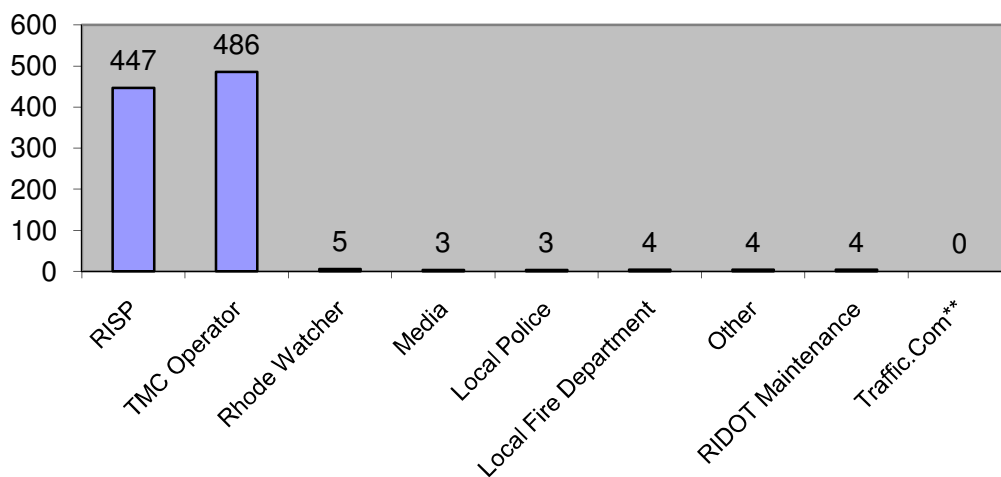
Number of Incidents by Primary Notifier



Notifier	No. of Incidents
RISP	447
TMC Operator	486
Rhode Watcher	5
Media	3
Local Police	3
Local Fire Department	4
Other	4
RIDOT Maintenance	4
Traffic.Com**	0
Transcom	2

Note: Primary notifier indicates the first notifier of the incident to the TMC. Additional notifiers are also logged, and are represented in the statistics for "all notifiers".

Number of Incidents by All Notifiers



10. Incident Response

On-Scene Responding Agency	No. of Incidents	Percent of Total Incidents
State Police	671	78.21%
Tow	319	37.18%
Local Fire Department	169	19.70%
EMS	166	19.35%
Local Police	57	6.64%
Service Patrol	26	3.03%
Mass Highway	0	0.00%
DOT	13	1.52%
Hazmat	0	0.00%
DEM	2	0.23%
Connecticut DOT	1	0.12%
Construction	0	0.00%
Coast Guard	0	0.00%
Department of Health	0	0.00%
K-9	0	0.00%
RIPTA	1	0.12%

	# of Incidents
# Involved Equipment(HAR,VMS or CCVE)	462
# of VMS Messages	95
# of DMS Messages	381
# of HAR Messages	272
# of Web Messages	789

Note: Numbers and percentages in upper table indicate how many of the incidents during the month were responded to by the agency indicated. Note that multiple agencies may respond to an incident, so percentages do not add up to 100%.

